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VICK'S

ILLUSTRATED MONTHLY

MAGAZINE.

DEVOTED TO THE PROFITABLE CULTURE OF FLOWERS AND VEGETABLES.

Vick Publishing Co.
Fifty Cents Per Year.

ROCHESTER, N. Y., NOVEMBER, 1895.

{ Volume 19, No. 1.
New Series.



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SAPOLIO
To Dazzle the Fair Sex.

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We have remaining a limited quantity of the following named Bulbs and offer them at a reduction from cost to close out. All can afford to plant at these prices.



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They can be planted outside any time until the ground is frozen so hard it cannot be broken up. Started in the house any time before Christmas they will make a grand show.

At these exceedingly low prices all should enjoy a handsome bed of fine flowering bulbs in early spring.

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Chinese Sacred Lilies, True Imported Bulbs, each 15 cents; three 40 cents; dozen \$1.50

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Snow Drops Single . . .	per dozen 10 cents
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Iris Angelica, fine mixed . . .	per dozen 20 cents
" Hispanica . . .	" " 15 cents

ALLIUM.

Allium Neapolitanum . . . per dozen 15 cents

JAMES VICK'S SONS, ROCHESTER, N. Y.

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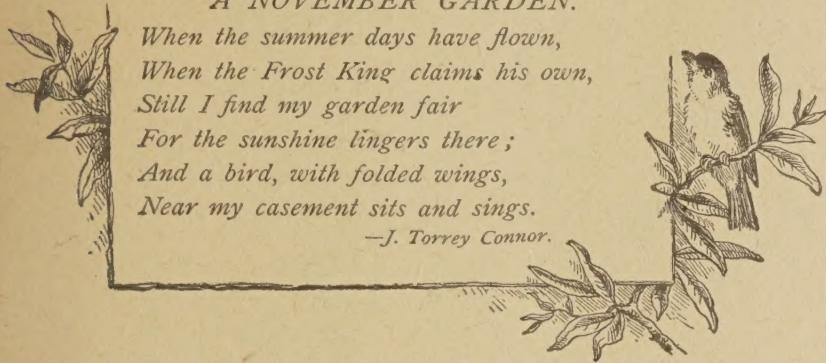
ROCHESTER, N. Y., NOVEMBER, 1895

NO. 1

A NOVEMBER GARDEN.

When the summer days have flown,
 When the Frost King claims his own,
 Still I find my garden fair
 For the sunshine lingers there;
 And a bird, with folded wings,
 Near my casement sits and sings.

—J. Torrey Connor.



HARRY GREENWAY'S FARM ECONOMY.

Nordinary practice cabbage plants are set from eighteen inches to two and a half feet apart, according to the variety, whether large or small, or an average distance of two feet. The fixing of these distances has been the result of thousands of trials under many circumstances and indicate the judgment of a multitude of cultivators on the subject. In arriving at their conclusions these cultivators have taken into account the convenience of working, the healthy development of the plants and the maximum size of the crop procurable from the planted area. In regard to the corn crop our farmers have arrived at equally as definite conclusions in the matter of planting, and three feet apart for the rows each way, or four feet apart, are standard distances. Greater distances have been tried, and single rows have been planted without showing any benefit by reason of greater space. Most of our garden and farm crops are as well understood in relation to this matter of space for the plants, and there is a general agreement on the subject. Here, however, is young Harry Greenway with new practices. He has settled down on a farm with the hope of making an easy living, after drifting around for the first ten years of his manhood trying to find a comfortable place without much work connected with it, but unfortunately he has never remained long in one position. His many changes have given him quite a variety of experiences, but without any particular benefit to him. The death of an uncle with some property found him an heir to a sum sufficiently large to purchase a good productive farm and properly stock and equip it.

Harry had long pictured to himself the pleasures of farm life, among which was a good table always provided with fresh vegetables and fruits and pure milk, and there was the opportunity of being his own boss, of going fishing and of roaming through the fields and woods with his gun at favorable opportunities. Now these excursions for game require considerable time, more than the ordinary farmer can find. But Harry Greenway is not to be thwarted in this way, and as he is not anxious to accumulate wealth, but only to live at his ease, he has decided upon a course of practice, after much racking of his brain, which, while it reduces the size of his crops, and so lessens the labor of harvesting and marketing, yet gives him the time to devote to his sports. He has decided to plant all his crops at double the usual distance. This enables him to economize in the cost of seeds and the labor of planting, harvesting and marketing. Of course, he only gets from a quarter to a half of what other good farmers produce, but on the whole he has an easier time. This is his system of farm economy. What do the readers of these lines think of it? Are any of them pursuing the same policy? In other words, are we, any of us, ploughing and cultivating our lands and receiving for our labor only a quarter, a third or half a crop when we might have a whole one? We may be doing this, and yet not with the same motives as Harry Greenway, but they cannot be considered better ones if we are following this course from carelessness, inattention or confirmed habits which we are not trying to improve. The farmer, the market gardener and the fruit-grower all unite in the chorus that times are hard, profits are small or none. If we can raise as much, or half as much, more on the same breadth of grounds as we are now cul-

tivating at an additional cost that will leave us a profit, it is certainly the dictate of thrift to do so. In making this examination, each for himself, and with reference to his own peculiar circumstances, we shall come in contact with most of the problems of land cultivation. Among them will be the subjects of surface and under drainage, of irrigation, of the treatment and preparations of soils of different characters, of manures and their application, the tillage of crops, their gathering and preparation for market and modes of conveyance or shipment. It is evident then that the good and successful cultivator must be well informed on a great variety of subjects.

Are we giving these subjects the attention they deserve, or that we can conveniently bestow upon them, or are we unconsciously following the course of Harry Greenway, while the interest on the mortgage is growing, and the farm buildings are running down, and the land is getting poorer? We know that this is the case with too many in every farming community. There are reasons why with some it will continue to be so, but to others there are opportunities offered which they may accept, and which will enable them so to shape their course that the balance at the close of each year shall show on the right side of the account. Some of the opportunities referred to are those of reading the best books on the subjects mentioned, the best agricultural and horticultural papers, of meeting for discussion in societies, of forming local or neighborhood clubs for the same purpose, of procuring the reports and bulletins issued by the Department of Agriculture at Washington and by the Experiment Stations. Agricultural science is progressing rapidly and new methods must take the place of old ones. The most successful men today in farming or gardening operations are those who are most thoroughly acquainted with the recent progress of rural knowledge, and adapt themselves to correspondingly correct practice. Anyone can do as well as Harry Greenway, a great many are doing no better and are willing to keep along in the same old profitless ways, and this leaves the opportunity for the enterprising and intelligent farmers and gardeners and fruit growers to take the lead and keep it. Now, although there is so much for all of us to learn, the matter of the first consideration is to put in practice

what we already know, to conduct our operations of culture according to the best knowledge we now have. How many of us can truthfully say that we are doing so?

If we are conscious of neglect as regard to some crop we probably know the cause of it. Of course we give the blame to the season, for the hot weather came on so quickly in the spring that we did not have time to make the thorough preparation that should have been, and again the rains kept off and the drought shortened the crop. But we all know the spring season may be a short one, and in most cases there is a chance to do much work in late autumn which will relieve the pressure in the spring. We all know that droughts and floods may come, but we also know that understanding, in a measure, the severity of both these misfortunes, that frequently stirring the surface soil lessens the effects of dry weather. By forethought, careful planning and prompt and energetic action we may anticipate and provide against many of the ordinary evils incident to the cultivators pursuits.

The use of sufficient and proper kinds of manures for different crops is a subject which few cultivators well understand. And yet it is one upon which, at the present time, there is a great amount of available and valuable information. The growing and plowing in of certain green crops, such as clover and peas and other leguminous plants, is a practice which can be employed to advantage far more generally than it now is.

* * *

THE RATHBUN BLACKBERRY.

OUR readers have already been informed of the main points in the origin and history of this new fruit which, on account of its valuable qualities, will soon be in great demand. For the benefit of those who have not seen what has already been published in regard to this variety we here give a brief account of its qualities. The Rathbun blackberry differs greatly from all other varieties, both in the plant and the fruit. The plants sucker but very little; the tendency is to make a branching plant with a strong upright central stem. The branches start out near the base, grow out long and droop over, and on account of this drooping habit of the numerous branches the bushes are seldom more than four or five feet high. As the branches lengthen and droop over those on the lower portion of the plants finally touch the ground, where, if they are covered slightly with soil, they will take root and thus form young plants, after the manner of the black cap raspberry. The plants are very productive and the fruit is of uniformly large size, jet black and very glossy; the drupes or pips are large, seed small and scarcely noticeable; flesh firm, and carrying well to market, yet tender and juicy, soft all through,

and without any core or hard center; flavor high and delicious. A large proportion of the berries will measure from an inch and a quarter to one inch and a half in length, and the whole crop is very uniform in size. Every one who has had the opportunity of tasting the fruit admits without reserve that it is the best blackberry ever eaten, and is more like the best dewberry than the blackberry, and yet much better than the dewberry. The fruit offered for sale in the market sells in preference to any other kind and brings a higher price.

The hardiness of the plant was severely tested the past winter, when the thermometer for several days indicated a temperature of 20° below zero. Plants of the Minnewaski and Erie blackberries on Mr. Rathbun's grounds were badly frozen making it impossible for them to produce a crop of fruit. But a considerable amount of live wood remained on the Rathbun bushes, enough to give a promise of two-thirds of a crop. Then when vegetation was making rapid progress, came the memorable May freeze, on the 13th of May. In writing of this destructive visitation Mr. Rathbun says:

"On the morning of May 13th I found my grapes all killed, except here and there a shoot that escaped the hard freeze, the temperature having reached 28°. * * * Have heard from some neighborhoods around that the berries were all killed. My other varieties, Minnewaski and Erie, are nearly all killed.

But now we come to our own favorite variety and I can tell you a different story. You are aware of the condition in which they came through the hardest winter we ever knew here, and now I will tell you that all of the old wood which lived through, started vigorously a new growth that set full of fruit buds, and they, too, were killed by the freeze, or at least 75 per cent of them. But true to its individual character, and unlike any other blackberry, it has sent up strong, vigorous shoots from the lower joints of the cane that have now reached a height of two to three feet and full of fruit buds, and several of these from each root bearing berries of the largest size will amount to quite a crop, which you see I now expect to have. Perhaps not a full crop, but likely to be of the largest size and fine quality. So, now, in spite of all the unfavorable conditions and adverse circumstances I expect a moderate crop of superior fruit."

The promised crop here spoken of was, we are pleased to say, fully realized, as we visited the place the latter part of July and found the fruit in excellent condition, and some of it, which was sent to leading horticulturists in different parts of the country, has brought very favorable expressions of opinion from them in regard to its superior merits. There is no question that the quality of the fruit far

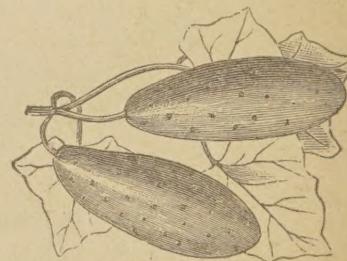
surpasses that of any other variety, and the productiveness of the plant is all that can be desired. Its hardiness, at least, equals, if it does not exceed, that of the other large berried varieties. The combination of these several valuable qualities must command for it the attention of all fruit growers, whether for the market or for private use.

* * *

GROWING CUCUMBERS.

SOME of our neighbors have been growing cucumbers in a new way for the last year or two, and as their success with them has been so wonderful, I will give their way for the benefit of others. A spot about four feet square is first spaded up and well manured; a half barrel with the head knocked out is then set in the middle of the spot, not pushed down into the soil, but simply resting on the surface. The barrel is filled nearly full of well rotted manure. The loose earth is drawn up slightly all around the edge of the barrel and the seed is planted there in the ground. Every day a pailfull or two of water is poured into the barrel and it soaks slowly through the manure until it reaches the soil where the seeds are. The surface being hollowed allows the water to reach the roots of the cucumber more readily, and the manure in the water makes them grow so fast that the striped squash bugs have little effect on them. This is the first year that we have tried the plan, and we are greatly pleased with it; we never had such strong, rank growing vines before, and they bear much heavier than when grown in the usual way. Dishwater and other slops from the house are a help to the vines also.

Others grow cucumbers where the vines can climb over brush or low trees. The



yield is much greater than when they are allowed to run over the ground and there is no danger of rotting in a wet season. Then, too, the cucumbers hang under the leaves and the sun cannot beat down on them, which is often the cause of bitter ones. When one has small space for vines, many more of them can be grown when they are so trained, as they then take up little except sky ground.

When growing cucumbers let the little folks try the experiment of raising some in a bottle. Use a good sized bottle with a small neck and insert the tiny cucumber in it. It will soon grow and fill the bottle and be the cause of much amusement. All will enjoy it, while those who do not understand the trick will wonder how such a big cucumber got inside the small neck of the bottle. BERNICE BAKER.

OUR GARDEN.



much is being said in the papers of late about the possibilities of a back yard, that I feel like describing ours. We cannot tell what the cash value really amounts to, as we sell very little of the produce, but

the comfort that it is to the whole family is seen more and more each season. The whole premises measure 150x160 feet, about one third of which is not planted to anything, but which is taken up by the house, and the lawn, which is seeded down.

There are sixty-five grape vines of about forty-five different varieties planted, all but three or four of which are of bearing age. These vines in an ordinary season produce more fruit than we can use, and as we have some fancy kinds we expect to do well from the sale of the grapes when the vines are larger. Among them we have Jessica, Niagara, Lady Washington, Lady, Moore's Diamond, El Dorado, Hayes, Dutchess, Empire State, and Pocklington, which are white varieties. Delaware, Salem, Lindley, Agawam, Vergennes, Goertner, Rochester, Norfolk, Jefferson, Brighton and Moyer, red sorts; and Aminia, Barry, Black Eagle, Worden, Concord, Moore's Early, Wilder, Eaton, August Giant, Herbert and Early Victor of the black ones. Jessica usually ripens first, about August 20th to 25th, with Moore's Early and Moyer closely following; and from that time until hard frost there are always plenty of grapes. When the clusters of fruit are thinned in July, I use the grapes for green grape jelly; the ripe fruit is canned and made into jelly and marmalade and a few bottles of unfermented grape wine made for use in sickness.

There are also plenty of strawberries on the place, a new bed being set out each spring and being allowed to bear but one season. This season we have about thirty kinds, which we are testing to see which are the best sorts for general planting. This year was a poor one for strawberries, as the late frosts took part of the crop and the extreme drought took most of what was left. Last year we had 200 boxes from a bed which contained about three and a half square rods. Half of them were sold to the neighbors, bringing good prices. Bubach No. 5 has been our main dependence heretofore, but now it seems to be running out with us and we must get new stock from some other place or start in with a new variety. We have great expectations from the Greenville and have planted quite a large number of them this year.

We have raspberries enough for table

use and often have a few for canning. We have red and black ones and also the large purple ones—Schaffer's Colossal, and the new Columbian. The latter has not fruited sufficiently yet, so we cannot make much of a report, but from what we have seen and read of it we are convinced that it is the coming raspberry, especially for cold climates.

There are also a few blackberries, not enough for much of a crop, but enough for a taste now and then.

There are gooseberries enough for use in their season and for canning; currants for the table and to make jelly; two Early Richmond cherry trees furnish us with all the cherries we need, except an off year occasionally, when there are none.

Three Siberian crab apple trees provide enough of their fruit for the family's use, and four Lombard plum trees give a good crop often. The latter cannot be depended on for a crop of fruit every year, so some young plum trees have been set out, as well as more cherries and several kinds of Russian apple trees.

Pie plant is plenty, six large hills producing more than can be used.

Besides the fruit we raise all the vegetables used in a family of four persons, except the potatoes, onions and squash for winter use. Cabbage, carrots, cucumbers, beets, parsnips, water and musk melons, tomatoes, Egyptian onions, turnips, summer and winter radish, lettuce, peas, string, bush and pole beans and corn.

A small spot is given up to horse radish, where it can grow undisturbed; in the fall a quantity is dug and buried in dry earth in the cellar and a root can be had at any time. A large sage bed has proved itself a great convenience in the family and much more is gathered each year than can be used at home.

A place is reserved for raising young grape vines, from cuttings taken when the vines are pruned in the fall. A ready sale is found for the young vines, especially among the persons who sampled the crop the previous year. Many seedlings are also saved, and we hope to find a few among them that will be worth keeping. We have a seedling growing on the place which originated near here, and it has the finest cluster of any grape I ever saw. The berry is red, large and sweet, but too thin skinned for shipping; but the cluster attracts every eye. The berries are set so closely together that the bunch is perfectly solid, and the berries are crowded out of shape. One cannot bend the cluster or scarcely pick off the berries without bruising the remaining ones.

A large space is used for flowers, about thirty roses being planted, besides vines and shrubs. About 500 gladioli bulbs are planted each year and considerable space is taken up with beds of pansies, cannae, coleus and geraniums.

People make a great mistake when they

give up a garden; the profit is not always enough to induce some persons to have one, but the health and comfort to be obtained from it ought to be inducement enough. The work on our place may not be as much as one would suppose from the description given; it is nearly all done by a man who works at other things ten hours each day, but puts in the time before 6:45 a. m. and after 7 p. m. in the garden. A horse cultivator is sometimes used, but after the plowing and harrowing are done in the spring most of the work is done with a wheel hoe. This implement has several attachments, some of which are original with the user, and it does good work; an ordinary hoe being used but little.

In this climate, Northern Illinois, the grape vines must be laid down and covered in the fall; the strawberries, too, must be protected; the roses and tender vines and shrubs are covered and the spring blooming bulbs need their winter blanket. This all takes time, but those who do the work love it, and instead of being a task it is a pleasure.

BERNICE BAKER.

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CURIOUS FOOD SEEDS.

Various kinds of seeds have been employed for food: The Indians of North America eat the seeds of a certain cactus, which are parched, pulverized and made into a palatable gruel. Their fondness for the seeds of some pines is well known, these "pifions" being to them what sugar plums are to white people. Sunflower seeds, too, they parch, grind and make into cakes, which are said to be equal to corn bread. From the same seeds they get oil for anointing their bodies. Seeds of many kinds have been found in the ruins of the ancient cliff dwellers of Utah, the evidence being satisfactory that they were used for food. Among these may be mentioned the common garden bean, which is also discovered in mines in Arizona. The cliff dwellers used to eat the seeds of the ordinary "pigweed." Indians generally to this day consume the seeds of many species of grasses, making bread and mush from them. Along the rivers in Colorado and Arizona grass seeds are collected in great quantities for grinding into flour. Grape seeds, gourd seeds and acorns are likewise employed. Of poisonous seeds the famous Calabar bean is a notable example; it is said to be worse than strychnine. Another seed alleged to be poisonous is that of the common cockle, which, finding its way into wheat fields, poisons the bread made from the wheat. It is the bane of millers in the northwest. It is popularly supposed that horse chestnuts are very unwholesome. Nevertheless, in Turkey they are roasted for coffee, fermented for liquor and utilized for horse medicine. In India there is a kind of seed that varies so little in respect to size as to be used for a weight standard. It is called the "retti," and weighs one grain. From its name is derived the word "carat," which has come into Occidental use.—*Popular Science*.

SOME RARE PLANTS OF BISCAYNE.



NE of the most interesting trees native to Biscayne Bay is the beautiful Sea Grape, *Coccoloba uvifera*, always found naturally near the coast, generally growing

on the edge of some mangrove swamp, and like many other sea shore trees, does not attain much height, but the branches sprawl over the ground to a great length. Kingsley gives such a good description of the plant that I quote it: "We have fancied it—and correctly—to be a mere low bushy tree, with roundish leaves; but what a bush! with drooping boughs, arched over and through each other, shoots already six feet long, leaves as big as the hand, shining like dark velvet, a crimson rib down each, and tiled over each other—imbricated, as the botanists would say, in that fashion which gives its peculiar solidity and richness of light and shade to the foliage of an old sycamore; and among these noble shoots and noble leaves, pendent everywhere, long, tapering spires of green grapes. This shore grape, which the West Indians esteem as we might a bramble, we found to be, without exception the most beautiful broad-leaved plant which we had ever seen." The fruit of the Sea Grape when ripe is of a rich purple and it hangs from the branches in large clusters, like currants; the berries are of the size of a large gooseberry, and have a large black seed, which is out of proportion to the size of the pulp. The flavor is very pleasant and excellent jelly can be made from the fruit.

Another native bush, that deserves extensive culture as a pot shrub is the Seven Years' Apple, *Genipa clusiæfolia*, so named on account of the time the fruit remains on the plant. Flowers white, resembling a jasmine and of the most exquisite fragrance. It is rather rare.

A genus of beautiful plants found on the Keys is the Echites, of which three species are to be found—all are climbers—and produce flowers in one species resembling an Allamanda, rich golden yellow; another produces white, exquisitely pink tinted flowers. The third and last species, *E. umbellata*, found on dry shell mounds; the foliage is veined with white; the flowers are produced in umbels, creamy white and resemble in shape an oleander; a most lovely plant.

Another vine found in the pine woods, is a delicate trailing plant, the botanic name of which I do not know, but it evidently belongs to the great pea family; the flowers somewhat resemble those of the newly introduced vine *Centrosema*,

but are distinct and of the most beautiful blue.

Another shrub that I have never seen described is what the natives call "Wild Coffee," and it certainly appears to be a species of coffee. There are two species of it, the leaves of one are light green, corrugated or waved, and much resemble the common coffee plant; it flowers in spring and produces great quantities of beautiful red, cherry like fruits, each of which encloses two seeds closely resembling coffee grains, only very much smaller, and instead of being smooth on the back as the common coffee bean is, they are marked with small lines running the length of the seed. Old settlers tell me that they have been frequently used instead of the commercial coffee and are equal in quality, but are so small that it is tedious work gathering them. The other species has larger leaves, of a dark green color, and purple fruit, and is a more beautiful plant.

The largest clumps or patches of Agaves—century plants—I have ever seen are to be found on the "Hunting Ground"—descendents of some planted here by Dr. Perrine over fifty years ago, and have spread until they cover great patches of ground and are regarded as a nuisance by the settlers. A great many send up tall flower stalks every year, many of them twenty feet in height, with great pyramidal-shaped top, covered with greenish yellow flowers and small leaves which put out at every joint. These leaves continue to increase in size, until by the time the seed is ripe, they are each of them perfect little plants minus the roots, ready to drop off and take root, furnishing an example of two modes of reproduction by the same plant at the same time. The variety growing here is the *Agave rigida*, armed with a large spine at the point of each leaf, and the edges of the leaves lined with hook-like spines which point backwards; there is also the variety *A. rigida* var. *Sisalana*, with smooth leaves, with a long sharp spine at end of the leaf. Both furnish good fibre; the young plants will endure any sort of treatment, and grow on almost a bare rock.

The most remarkable fence I ever saw was built by an old friend of mine. He enclosed his little grove of tropical fruits by a stone wall some four or five feet high, and in the crevices among the rocks on top of the wall, he stuck a row of small agave plants, which at once began to grow luxuriantly and sent roots down each side of the wall to the ground. The last time I saw them many of the plants were five or six feet across the top and made a fence that an elephant might hesitate to cross.

The reader will remember the small hommock I described in a former article; it was the most wonderful little spot of woods I ever saw, especially in point of the great variety of plants found there.

Near the center of the hommock was a large and deep sink, the rocky sides of which were lined with the most beautiful ferns and large plants of *Yucca aloifolia*, ten or fifteen feet high; near the top of this sink grew a large live oak which was certainly a very remarkable tree, not for any remarkable feature peculiar to itself, but for the immense number of parasitic plants that covered each branch. *Tillandsias* in great numbers and all sizes, from immense plants two to three feet across of the *T. utriculata* to the little *T. caespitosa*. *Epidendrums* of two species, including *E. venosum*, the beautiful butter fly orchid, and the whole draped with long strands of the grey Spanish moss, *Tillandsia usneoides*, which is very rare in this part of Florida. Every available space on the tree was occupied, and I have never seen a tree with such a quantity or variety of plants growing on it. The *Tillandsias* are deserving of far more extended culture than they have yet received; grown on blocks of wood, or in wire baskets filled with moss, and hung in a window they make a unique and beautiful appearance, and are of the easiest culture. *T. utriculata* is the most beautiful plant, and grows to a great size, but *T. bracteata* has the most showy flowers, brilliant crimson bracts and flower stalks and purple blossoms—very beautiful.

A rather fine ornamental small tree or bush is the Coco-Plum, *Chrysobalanus Icaco*, with its rich and glossy evergreen foliage and beautiful wax like fruit. There are two varieties of it, differing only in color of fruit; one has dark purple fruit, and the other fruit of the purest white; the fruit is about one and one-half inches long, with a large soft-shelled seed in the center; the flesh is extremely white and very sweet, without much flavor and always reminds me of cream candy. I know of no more beautiful tree than this when loaded with its fruit. There is another species found on the sandy ocean beach, which bears a fruit almost as large as a hen's egg, which looks exactly as if made of wax, pure white with delicate blush, and is superior in quality to the other species.

One of the most beautiful plants I have ever seen is what is known on the bay by the name of Shell Orchid, though it is not an orchid and I am uncertain as to its botanic name, but think it is some species of *Alpinia*. It grows four to five feet in height, and the plant and foliage somewhat resemble a canna, only the leaves are much more glossy and of a firmer texture; the flowers come out at the end of the stalks in long racemes eighteen inches or two feet in length, and the unexpanded flower buds look exactly like some exquisitely white and pink tinted sea shell; they also somewhat resemble a shell when expanded and are of the richest

colors, in so many shades that it is impossible to describe them.

The *Hamelia patens* is very common and grows to a great size, and would make a choice pot plant, with its fine foliage and clusters of large, red flowers. In many places, plants grown as greenhouse plants north, have escaped from cultivation, and grow wild, and in some instances have formed great beds. I know of a great bed of thousands of plants of the curious leaf-sprouting plant, *Bryophyllum calycinum*, and it is an odd sight when it sends up its hundreds of spikes of curious flowers. *Russelia juncea*, in like manner, has spread into great clumps. *Crinum Kirkii*, grows in the open ground the year round and increases to an immense size. *Cestrum nocturnum*, the night blooming jasmine, makes great clumps twenty feet high, and if near the house the fragrance is so oppressive at night that they become a nuisance and have to be cut down. MARTIN BENSON.

FRUITS IN THE SOUTH.

GEORGIA is now the foremost peach-growing state in the country, and a peach carnival was held in Macon during the height of the season to celebrate the most successful season ever experienced. In the Northern markets Georgia peaches have brought excellent prices. So phenomenally successful has the industry been this season that the California peaches usually so plentiful early in the season have been crowded out of the market. The chief varieties raised in Georgia are the Elberta, Crawford, and Bell, all handsome and delicious fruits.

The peach industry has developed rapidly in the last half dozen years in Georgia, and more money has been put into the orchards than any other single crop. Good peach land sells from \$100 to \$300 per acre, and enough land is under cultivation now to supply the whole United States with peaches. The annual crop today amounts to several million baskets, and it seriously interferes with the Maryland and Delaware crop. Long before the latter is in the market, the Georgia fruit has taken off the keen edge of the appetite for early peaches. The first arrivals of the Delaware crop formerly brought handsome prices, but this is no longer the case, for the Georgia peaches are considered superior to the early Delaware fruits that are shipped north. Today the peach harvest in Georgia is an important one, and the first basket of peaches is hailed with delight.

In more respects than one the south will compete with California in the fruit growing industry, Heretofore Florida has been the only southern state considered worthy to rival California in fruit growing. Her oranges are acknowledged everywhere to be of superior flavor. But Georgia, Texas, Delaware, and other southern states are now raising fruits that

will seriously interfere with both the northern and California products. This has been a great season for southern blackberries, huckleberries, raspberries, plums, and currants. Many of these small fruits grow wild in the mountainous districts of the south, and tons of them have been shipped to New York to meet the early demand. Large plantings of blackberries, raspberries, and currants have been made by the farmers, and in a few years the finest berries will come from this and adjoining states. The small berries grow naturally here, and when a little cultivation is given to them they increase greatly in size and quality. The Georgia watermelons are too well known to need a description, but they bring into the state many thousands of dollars every season.

At the Atlanta exposition this fall the display of the fruits of the south will astonish many visitors from the north. It was not a great while ago that apples were considered as great a luxury in the south as oranges in the north. Very few were raised anywhere south of Mason and Dixon's line, and these were mostly poor, knotty specimens. In Virginia there are some old apple orchards that are of considerable historical interest to-day. One near Winchester, Va., was planted over one hundred years ago, and today the yield is quite remarkable. A few years ago 1800 barrels of apples were sold from this orchard at \$4.25 per barrel. But though old apple orchards are a rarity in the south, new ones are becoming plentiful. Texas, for instance, is preparing to make a fine exhibit at the exposition of a variety of fruits that no one would expect to find in this cotton-growing territory. The apples are raised chiefly in Eastern Texas, and in the northern tier of counties bordering the Red River. In this latter region great quantities of peaches, grapes, plums, pears, and small berries and fruits are raised every season. The Seckel pear, in particular, does well in Texas, and all conditions of the soil and climate appear perfectly adapted to their production. In the Pecos Valley fruit growing has reached tremendous proportions. Within the past five years several million dollars have been expended in irrigating this valley, and the results have been so successful that the whole region is full of fruits. In regard to fruit growing in the Pecos Valley, a fruit owner in that region said recently to the writer: "Apples are a great success, and there are some of the finest orchards in the world. A great point in favor of these apples is that they are perfectly free from all blemish and are rarely attacked by worms or insects. These apples are shipped east, west and north, and they have so far found ready sale at good prices. Peaches are also a fine fruit for this region, and we are growing all of the leading varieties for the local markets, and a good surplus for shipping

north. Grapes do as well here as in California. We are now raising the finest raisin grapes, the Muscat of Alexandria, the Malaga, the wine grape Zinfandel, the Seedless Sultana, and the Tokay. The Pecos Valley fruit region is destined to rival California in all of the tropical, semi-tropical, and northern fruits."

Delaware has also blossomed out as a great producer of northern pears and apples, and these will attract almost as much attention as her peaches. Since the peach crop has become so uncertain in the state, and the market hemmed in by strong competitors north and south, the farmers there have turned their attention to a more diversified system of fruit culture. Apples occupy a prominent place in the new industry. Twenty-five years ago apple orchards were planted in Delaware, but the trees matured their fruits too early in the season to suit the climate. They could not be kept over winter, and apple growing was pronounced a failure. But as experience has since demonstrated, all that was needed was local varieties adapted to the soil and climate. The apple thrives well there, and some of the new orchards are producing an abundance of fruits that will keep until the following spring. Such northern varieties as the Baldwin, Northern Spy, and King are not suited to the climate. They mature their fruits in August and September, which is too early for the winter market. But the local varieties known as the Jackson, Stayman's Winesap, Black Twig, Arkansas Beauty, York, Nansemond Beauty, and Grimes Golden, produce excellent crops of good, salable apples. All of these apples are little known to northern growers, but they will be on exhibition at Atlanta to show what the south can do in fruit growing.

Fine early grapes come from Florida, Louisiana, Georgia, and other parts of the south. People are raising grapes in all parts of the south now, both as a home article and a shipping fruit. Fine Niagars, Delawares, Moore's Early, and the common black grapes are sent north early in July. The Western New York grape region stands at the head of the grape industry at present, but there are southern regions which are rapidly approaching it in this respect.

PLANTING TREES ON WASTE GROUND.

There is a great amount of land on most farms which is practically waste. Some of this is hilly ground which it is not profitable to till, and of very little use as pasture. Such lands with a little care could have trees started on them which in a short time would require no attention. Then, there are also places where windbreaks would be desirable, and shade along the road and lanes. In view of the fact that our source of lumber and timber supply is gradually and surely being contracted, and that these materials are constantly appreciating in value, it is the dictate of wisdom to provide a new supply. But do not plant fruit trees in such places. On account of the many diseases and insects to which these are subject they should be planted only where they can have constant supervision and good cultivation.

Letter Box.

In this department we shall be pleased to answer any questions relating to Flowers, Vegetables and Plants, or to publish the experiences of our readers. JAMES VICK

Fruit of Japan Quince.

Please inform me if the fruit of the Japonica (or Japan quince) is ever used for food and if so how used. We have a Japonica that has five very fine large fruits on it. They look as if they might be good to eat but we did not know whether they were edible or not.

MRS. A. H. D.

Flat Rock, Ill.

We have understood that a good jelly could be made from the fruit of the Japan Quince. There is no reason why it should not be used for food if desired. Perhaps some of our readers may have already experimented with it and can give their experience.

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Probably Malva Moschata.—Orange Candytuft.

In the June issue E. T. G. asks after a plant that in some respects corresponds with some I have had bloom this summer for the first time, but did not know the name—only I knew it belonged to the mallow family. These plants came from seed planted last year which were given to me as musk plants—and indeed they do have a faint musk odor.

Last year they grew about a foot high and died back part way in the winter—but started early this spring and were soon in bloom, and have been all summer. My plants have very dark green leaves. They were roundish at first, but soon began to divide until they had more divisions than a skeleton leaf Rose Geranium, and I used many of them for foundations of button hole bouquets, and nobody could tell what they were, only they were lovely. The flower is like a single hollyhock, instead of a "tube," and the seed are little "cheeses" as children used to call the hollyhock. Seed—I have two shades of pink and white. I can send seeds if E. S. G. has not got them yet.

In same number Mrs. L. C. T. asks about orange candytuft. I have two plants of this year's bloom which came up last year from a package of mixed seed. It is perennial, the leaves and blossoms are like candytuft, but blossoms not quite so large as some. After ripening seed I was surprised to see the plant was full of bloom again. It begins to bloom very early in the spring. I should like a name for it if this is wrong.

MRS. M. A. B.

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Althæas, Lilies, Hypericum, Hibiscus Sunset.

I would like to have you tell me through your magazine about my althæas. I received two double ones from you last fall. Last winter they died to the ground but the past season they threw up shoots, one six and the other three feet high. Now, shall I cut all back to one this fall or leave them to next season? The white one has large blossoms, the red one not more than two-thirds as large. The canna bulbs have been in blossom since the last of May. My lilies have done well except the croceum and Thunbergianum grandiflorum, those did not blossom at all last summer. One of them, I cannot say which, is starting to grow. What shall I do with it? Will the growth it makes this fall injure the spring growth? It has two shoots, the same that it made in the spring. The others have died to the ground. My Hypericum Moserianum had two blossoms in four weeks after I received it. It has made a number of shoots but no more blossoms. Shall I expect them this winter? Sunset Hibiscus measures eight feet, four inches, I counted eight buds this morning. It did not blossom till the middle of September. The buds on now will not mature probably. The first blossoms were very large, the petals very delicate like crape. The last were not much larger than a cup.

E. A. G.

We would not cut back the althæas, but would endeavor to protect them this winter by tying straw about the young shoots. This may not be necessary another year, but these young shoots are tender, and should be protected the first winter. It would be well even to follow

up this method of protection of this plant for two or three years, and by that time the plant will have sufficient strong wood to enable it to endure the cold.

All that can be done with the lilies is to draw over them several inches of soil, and over this to lay a covering of leaves and hold them in place by some branches laid over them, and perhaps some soil scattered over all. Early in spring all can be taken away.

The hypericum might have been planted out last spring when received; we judge by the inquiry that it was not. If it had been planted out, it could have been left out during the coming winter. If it is now in pot in the house it should be kept in a cool place where it will be nearly dormant until about February; then it can be given more heat and started to grow, and it will bloom in the spring. But here we treat these plants as hardy, leaving them unprotected in the ground all winter.

Hibiscus Sunset will start up from the roots next spring, and will probably bloom earlier next year.

**

DOUBLE SWEET PEAS.—A REPLY.

My attention is called to an article in VICK'S ILLUSTRATED MONTHLY MAGAZINE for October on double sweet peas. It is a reply to what I said on this subject in the *American Florist* of September 14. They put me under great obligations in the kind way they take issue with me. I feel a good deal more anxious to emulate their example of courtesy than to prove my position. One needs to see in cold type his own writing in order to see how his language sounds. From another friendly source also I am told that my strictures on the double sweet pea sounded harsh. Messrs. Vick's long experience among flowers shows in their very tone of writing that they have caught their gentle influence. And the point which they take issue upon, with regard to double flowers being made from stamens, is, of course, well taken. The flowers they mention as being doubled, although more or less irregular, and without any change of the stamens are well known. Indeed, some of them may more properly be said to be doubled than if their extra petals were developed stamens, for they apparently have one corolla set right into another. The one little pedantic slip in my article doubtless was equally noticed by others.

But the real question is about double sweet peas. If the new one, which Messrs. Vick are to offer under the name of Bride of Niagara next season, does produce a considerable percentage of blossoms with two or three standards, and if flower patrons are pleased with it, and it holds from year to year, its trade value would entitle it to respect. The variety that has produced most of these so-called doubles

this year is Lottie Eckford, and it is particularly adapted to this, for it gives more of the blue edge effect. But I still hold to my first position, that thus far these so-called doubles have been malformations, and a mere sign of a little excess of vigor, and that the edict of a true taste will be for a single flower, with an expanse of standard on which the individual color and markings of each variety will have a field to display their peculiarities. I compared this to the pansy, and although Messrs. Vick have sent several specimens of double pansy there is no danger of the large single pansies being given a second place in favor of the inferior sized double. If a flower has perfume to commend it, like the double violets, the broad surface for display of color and markings is not so important. In the sweet pea we have the perfume, but no less do we have a standard perfectly adapted to that which makes the large pansy such a favorite, a broad surface where nature can display its finest art in coloring, and in those beautiful markings which add such interest to nomenclature.

Your paper being a trade journal gives greater freedom in discussing these points. I should be very careful about writing anything for the public eye which handicapped in any sense the sale of a prospective novelty. I think my friends, Messrs. Vick, will find me glad to help in the introduction of anything that they believe to be meritorious.—W. T. Hutchins, in *American Florist*.

**

HARDINESS OF THE ROSE GERANIUM.

The rose geranium, according to a writer in the *American Florist* can endure very great cold. An account is given of some of these plants which were left out in the ground in the fall and remained all winter. At one time the mercury indicated 17 degrees below zero. The plants sent up new shoots from the roots in the spring. Some plants which were left out winter before last and survived were again purposely left out last winter for another trial. The temperature fell as low as 12 degrees below zero, and was accompanied by a brisk gale. The plants were without protection, but came through all right, and started a new growth in the spring.

**

HOW TO CRYSTALLIZE FLOWERS AND GRASSES.

The following method is given by the *Scientific American*:

The bunches are first arranged in a suitable manner, tied and secured; a solution of four ounces alum to one quart boiling water is made, and when this is cooled to about 90° or blood heat, the bunch of grass and leaves is suspended in it, in a deep jar, from a rod placed across the mouth of it; as the liquid cools, crystals of alum are deposited upon every spray, the finer and smaller, the weaker the solution is made. The deposit of crystals occurs in the cooling liquid, because hot water dissolves more alum than cold water, and as the water cools, the excess of alum forms crystals which attach themselves to any fibrous matter in contact with it more readily than to anything else. These crystals enlarge by accretion constantly, as long as there is an excess of alum in the solution. When the supply is exhausted, the solution is warmed and more alum is dissolved in it, it is returned to the jar and the bunch of grass is replaced. When sufficiently covered with crystals it is taken out and dried and is finished.

THE ANDROMEDAS.

THE genus *Andromeda* is quite an extensive one, embracing both evergreen and deciduous shrubs, all of which deserve more attention than they at present receive, as they are of the easiest culture in any soil excepting one that may be strongly impregnated with lime. But in order to give them an opportunity to properly develop themselves they should be given one that is deep and moderately enriched. The evergreen and sub-evergreen species should have a sheltered situation. An occasional top dressing of well decayed manure is decidedly beneficial, and while the shrubs are small grass or weeds should not be permitted to grow around or near them, and during their season of growth it is well to examine them occasionally, checking growth in one place and encouraging it in another, so that well shaped specimens may be obtained from the start.

It is to be regretted that the *Andromedas* are so sadly neglected, as all are so well adapted for general cultivation; the tall, bushy varieties for the decoration of the lawn, while those of a dwarfer habit can be used in the mixed flower border to good advantage. I hope that all who plant ornamental shrubs the coming spring will see that a few *Andromedas* are also included. The following is a descriptive list of the most distinct and desirable varieties.

A. CATESBAEI—Catesby's *Andromeda* is a rare and beautiful evergreen species, growing about four feet in height. It has elegant, shining, deep glossy green, lanceolate leaves, and blooms in May, the showy spikes of white buds being formed at the axils of the leaves. The flowers are slightly sweet scented.

A. CALYCOLATA—Is popularly known as the "leather leaf." As it grows but eighteen inches in height it is well adapted for the flower border. It has sub-evergreen dark green foliage, and the pure white flowers are produced in terminal panicles during the month of May.

A. FLORIBUNDA—The free blooming *Andromeda* is also known as the Lily of the Valley tree. The plant forms a low, rounded bush of dark green foliage which is retained throughout the winter, and the flowers, which are pure white, are borne in terminal panicles during the month of May. As the flower buds are formed in the fall they give the shrub the appearance of being in bloom all winter.

A. MARIANA—Is the well known Stagger Bush. It is a charming native species with deciduous, oval, coriaceous leaves, and large clusters of pinkish white flowers in May or June. Under favorable circumstances it will grow about three feet in height.

A. POLIFOLIA—Is the "Wild Rosemary" or "Moorwort." It grows about eighteen inches in height, forming a

dense, low growing bush with long, narrow leaves of a glaucous green color. It blooms in May, the rosy pink flowers being produced in clusters.

A. SPECIOSA—The showy *Andromeda* grows about three feet in height, forming a smooth branched shrub with coriaceous deciduous leaves, and large umbels of very showy pure white flowers, which bear a striking resemblance to enlarged "Lily of the Valley" blooms. The dwarf habit of this plant, its showy blooms, and elegant foliage, all unite in making it one of the finest of hardy shrubs that bloom in June.

A. RACEMOSA—Grows about five feet in height. It blooms during the month of May, the flowers being produced on curving stems with a row of pure white, little bell shaped blooms drooping on each side. It is a deciduous species with bright red twigs and lance oval, slightly pointed, serrate leaves. CHARLES PARNELL.

Floral Park, N. Y.

**

TESTS OF SMALL FRUITS.

Bulletin No. 91 of the New York Agricultural Experiment Station gives the comparative yield of a large number of new varieties of strawberries. The result of the comparisons "confirms the opinion formed after studying the tests of hundreds of new strawberries that have been tried at this station, that a large proportion of them ought not to be disseminated, because they are inferior to well known cultivated sorts."

The same report says, in regard to blackberries: "The blackberry crop was almost an entire failure, so that no attempt has been made to publish descriptions or yields of varieties."

The Harris red raspberry, which sometime since was noticed in our columns, is thus spoken of: "This berry has received notice in previous bulletins and reports of this station as a productive variety of very good quality. The canes are of the

strigosus type, vigorous, but not tall and need not be pruned. This season the fruit is of good size and quite firm, but not so good in quality as usual. The canes of the plants that were set in 1889 were killed back 75 per cent. by the winter, but younger plants, set in 1883, were injured but very little. It has been quite hardy heretofore."

In comparison with other varieties it was fifteenth in productiveness, a matted row thirty-five feet long yielding thirty-nine ounces of berries against 421 ounces by Cuthbert in a row of the same length.

The Columbian was the most productive of all varieties of raspberries under trial.

"Among the purple raspberries the Columbian was the most productive. The plants produced their first crop this season, yet it ranks second in productiveness among the raspberries fruited, giving a yield of 540 ounces from a row thirty-five feet long. Its manner of growth and fruiting is much like the Shaffer, but it is more vigorous and was injured less by the winter. As compared with Shaffer the fruit is larger, firmer and a shade lighter in color. It yields a larger per cent. of its crop late in the season than does the Shaffer.

This is a promising variety and is worthy of extended trial.

**

SOIL PROTECTION IN WINTER—One material is always at hand to use in protecting garden plants in winter—that is, the soil. And it is one of the best materials, and for very many plants all that is needed. It can be drawn up around them, and over them if needed, and thus secure them against injury. The ground often freezes two feet deep in our northern climates, and thus must at the same time freeze the roots of many plants, but as they thaw slowly and gradually, on account of the surrounding soil, they remain uninjured. Use the soil for protection wherever it can be employed to advantage.

Croup Cured After Doctors Failed

"When a boy, I was subject to croup, the last attack being when about twelve years old. The doctor had almost given me up, every remedy that he tried having failed to afford relief. At last, he gave me Ayer's Cherry Pectoral, and a speedy cure was the result. I have always believed that Ayer's Cherry Pectoral saved my life, and often recommend it to others."—W. S. TURNER, Norwood, Ga.

Ayer's Cherry Pectoral

For all Diseases of Throat and Lungs.

AYER'S the Only World's Fair Sarsaparilla.



ROCHESTER, N. Y., NOVEMBER, 1895.

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Average Monthly Circulation.

Double Sweet Peas Again.

In our last number under the title of Double Sweet Peas, a reply was made to some statements of our friend Mr. W. T. Hutchins, which had been published in the *American Florist*. In reference to this reply Mr. Hutchins has made a response in another issue of the journal named, and his answer is reproduced on page 6 of this number, and to it we refer our readers.

We have no desire to continue unnecessarily this discussion, nor in any captious way to disagree with our friend who is so devoted to the sweet pea and who has done so much for its advancement and culture in this country, and especially as he so gracefully and fully concedes the points which we made it might be thought discourteous on our part to push the consideration of the subject further. But in order that the whole matter may be cleared of any foginess that hangs about it we here offer the following additional remarks:

"The real question," as Mr. H. says, "is about double sweet peas." In regard to this matter we think our friend has assumed a false ideal standard of what such a flower would really be. To be sure, in so many words he has not defined that standard, but that it is different from the one that has appeared is evident. It is this thought, apparently, that suggests his remarks that "there is no such thing as a double sweet pea. No flower is doubled except by changing stamens into petals, and as a rule such flowers are regular in their form. Blossoms of the Pulse family are not at all adapted to doubling."

In accordance with these statements is

the echo which comes from California by Mr. Waldo Rohnert, a commercial grower, published in the *American Florist*, of October 5: "Mr. Hutchins is right when he says there is no such thing as a double sweet pea. * * * We may in some future day get a flower in which the standard is developed into three full petals, but this would not be doubling the flower in the full meaning of that term." From these quotations, from each of the writers named, it thus appears that they have an idea of what a double sweet pea should be, but perversely enough nature gives us a different form; their ideal is not realized, and therefore it is not "doubling the flower in the full meaning of that term." Let us now examine this subject with regard to the facts, and, for the time being, set aside any preconceived opinions. In this way only may we get a proper conception of the term doubling and an accurate comprehension of the change which has taken place in the so-called double sweet pea, *Bride of Niagara*.

The flower of the sweet pea, and as a rule all other irregular flowers, has its present form, through a long process of evolution, from a primitive regular form. The change has been brought about through insect agency. These statements are made in accordance with a mass of scientific observations which are now unquestionable, and it would be out of place here to offer any proof in their behalf. If we examine the flower of the sweet pea we shall notice that the change from a flower with five petals is a very great one. The corolla consists of a keel, two wings and a banner. The hollow keel or boat form encloses the essential organs. The four parts named are what were originally five parts of equal size and similar form. Two of the petals, somewhat reduced in size, are joined together to make the keel, two are represented by the wings, and the fifth by the greatly enlarged banner—the cohesion of the petals, thus forming a keel, while it gives security to the enclosed organs also affords a secure resting place for visiting insects; and the delicate, or drooping, position is accounted for by the weight of the insects, the strain or pressure which they have given having caused a thickening of the parts at the point of greatest strain, thus holding the keel down from a more upright position. This modification of these parts is for the benefit of the flower since it is only fertilized by means of insects. The change thus brought about has been strengthened by ages of heredity. In view of the peculiar circumstances, it could not be expected that variation in form should first appear, if at all, in that portion of the corolla represented by the keel. On the other hand the upright position of the banner is specially favorable to an increased flow of nutriment, in accordance with a well known principle of vegetable physiology. As a result of such action, it spreads out, enlarges, becomes showy and thus attractive to the insects with which the flower lives in harmony and companionship. Here, then, as might be expected, appears a duplication of the parts, two or three well formed banners being produced. The wings which are in an intermediate position between the keel and the banner are the next affected, and duplication takes place in them occasionally, sometimes there being three wings and very seldom two pairs. Lastly

we have noticed in the calyx, also, a sixth point or division. If one wishes to pursue the scientific aspect of this subject Henslow's valuable work on the "Origin of Floral Structures" can be specially recommended. In this work, too, one has an explanation how the duplication takes place without the transformation of stamens into petals.

We trust it is now clear that if there can be a double sweet pea it should be expected to be a flower with two or more banners. The *Bride of Niagara* is a variety producing such flowers, and therefore without contradiction it is a double sweet pea.

As to a "malformation" it may be said that, in one sense, it is a malformation. As our old professor in botany used to say: "Any double flower is a monstrosity." But in view of the fact that it is Nature which works out these changes it might be better to call them transformations than malformations. If the double sweet pea is a malformation so is the most beautiful double rose, ordinary single roses are the natural ones. In the same sense our best cultivated fruits are malformations and our best culinary vegetables. The horticulturist is constantly at work to bring about malformations, which, however, he calls ameliorations and improvements, and the common sense of the people approves the terms.

"This is an art
Which doth mend nature; change it rather, but
The art itself is nature."

—Shakespeare.

Lastly Mr. Hutchins very properly regards the great feature of sweet peas, next to fragrance, to be the "broad surface for display of colors and markings," and this is what Mr. Eckford is striving for. It is a very desirable end to be obtained, and certainly Mr. Eckford has the congratulations of all flower lovers for the success he has attained. But if one broad banner is so desirable for the display of beauty how much more so are two or three! If the banner refuses to increase beyond a certain size as a whole, we cannot refuse to recognize its charms when it transforms itself, and duplicates and triplicates its beauty.

Nerves

Are like Fire.
They are

Good Servants

But make

Poor Masters

To keep your Nerves steady
Your Head clear,
Build up your Strength,
Sharpen your Appetite,
You must have

Pure Rich Blood

The Best Medicine to Vitalize
and Enrich the Blood is

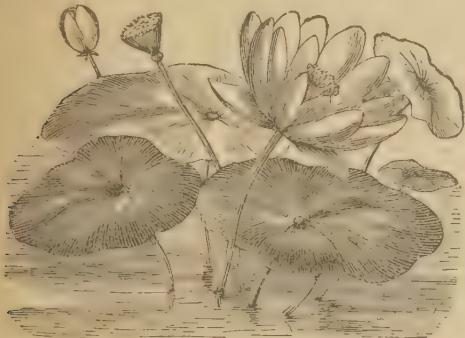
Hood's
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The Only True Blood Purifier
Prominently in the Public Eye.

Hood's Pills cure all liver ills, biliousness, headache. 25c.

CHARMS OF THE LILY POND.

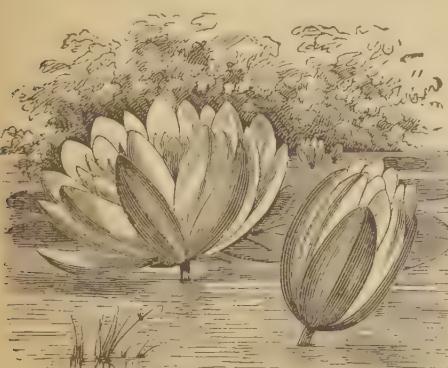
A casual glance at a lily pond reveals two well defined characteristics: Plants with foliage and flowers standing far above the water, and those with their leaves and pads afloat on its surface. Chief among the first class is the Lotus, whose grandeur and beauty defy alike the powers of the pen and the brush. Its massive pea-green foliage or peltate leaves, resembling inverted umbrellas, stand a foot or more above the water, each with a fairy lakelet of molten silver dreaming in its bosom. Surmounting the wilderness of green, the individual flowers arise like the gorgeous banners of the Orient.



LOTUS—*NELUMBINUM LUTEUM*.

Representing the second class is the Water Lily proper, with its cordate and bronze-green foliage, interspersed with thousands of red, white and yellow blooms, either resting on the water or peeping like white kittens from the masses of tender foliage.

But a general view of the pond does not satisfy our longings. We draw nearer to touch and embrace, to acquaint ourselves with the singular habit of the plant. The leaves of the lotus are strong and flexible. Water thrown against them does not adhere, but glances off instantly. The uprights will hold a pint or more of water, and when overloaded the stems deflect, turning the water out, and at once resume their normal position. During a shower they may be heard pouring out their great bowls of water in every direction.



WATER LILY—*NYMPHÆA ODORATA*.

The foliage of the Nymphaæas is more flimsy, the surface appearing clammy or oily, and water poured on the leaves trickles off reluctantly. The root formations are equally varied. The smooth tuber of the lotus, the nut-like offshoots of Nymphaæ Devonensis, and the thick, creeping rhizomes of *N. candidissima* are quite

unlike, and afford interesting study. But while the foliage and roots show such a diversity of forms, the flowers of all are wonderfully alike in their general outline. The petals of all are keel or canoe-shaped, which enables them to ride the waves in a most novel and suggestive manner. The stamens are numerous, filiform, and quiver above the pistil with every motion of the flower. The petals of the Lotus are deciduous; those of all other species are persistent. The flowers of the whole family of day bloomers open early in the morning and close in the afternoon. Those of the night bloomers open about 8 o'clock in the evening and close about 10 o'clock in the morning. The flowers of the Pontederia and Limnocharis last but one day.

The Lotus opens four days, and fades from red or yellow to almost white. The Nymphaæas last from three to six days, according to the condition of the weather. The seeds of the Lotus ripen far above the water, in a torus resembling an inverted cone. The Nymphaæas close their petals firmly and drop beneath the water to ripen their seed, while some curiously draw their seed pods into the mud by a spiral coiling of the flower stem.

Now, let us add the living reality to the scene. Swarms of bees, butterflies and humming birds, regaling themselves on the exuding nectar; birds bathing in the water and sipping from the dainty lakelets on the foliage; the huge green frog basking his uncouth and bloated ugliness on the floating leaves—and the picture is still incomplete! For, true to its placid beauty, the water intensifies the scene by portraying all these by inverted images, as if their antipodes had pierced the earth and offered their counterpart to glorify the American scene.—*The Aquarium.*

SUCCESSFUL FLOWER GROWING.

Let me write you about the gorgeous display of flowers grown on the grounds of the Cambridge Hospital, Massachusetts. Never before has there been here so grand a show of flowers as we have had this season from seeds from thirty-four papers of pure white and red zinnia seeds started in a hot bed the latter part of April. I had two rows, each ninety-seven feet long and three feet wide on each side of a long walk, from the main building to the contagious hospital. They have been in constant bloom ever since June and have astonished everybody by the brilliant sight. Then the dianthus, phlox, petunia, sweet alyssum and ageratum were grand. The French Cannas, Madam Crozy and Francois Crozy have been bright. Verbenas also have been much admired.

The cockscombs have done fairly well, though but very few of the seeds started.

I am much interested in VICK'S MAGAZINE, which comes to me every month, and will you kindly tell through its columns if the dwarf zinnias are as brilliant as those of taller growth.

MRS. MARY BALLON.
Cambridge, Mass.

NOTE—The colors of the dwarf zinnias are as bright as those of the tall ones, but the flowers are smaller, and as a mass do not present as great an expanse of color as the others.—ED.

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THE HUNN STRAWBERRY.

For several years seedling strawberries have been raised and tested at the New York Agricultural Experiment Station, Geneva, N. Y. At last, after testing and throwing away of hundreds of seedlings, many of which had merit and were equal to, if not better than many varieties now on the market, but not superior to the best, one has been found which is thought to have a sufficient number of good points to entitle it to dissemination. The name Hunn has been bestowed upon it to perpetuate the memory of its originator, Mr. C. E. Hunn. The following statements concerning it are made in the Station Bulletin No. 91:

As it is a pistillate variety it must be planted with some staminate variety, so that its blossoms may be fertilized. Gandy, one of the standard late varieties, is recommended for this purpose.

Compared with Gandy, in 1894 the first picking of Hunn was two days later and the fruiting season continued eight days longer. In 1895 the difference in their fruiting season was practically the same as in the previous year.

Description.—Hunn, P. Blossoms with Gandy; plants very vigorous; foliage strong and healthy; fruit stems long, strong and upright. Fruit large, good dark scarlet color, moderately firm, fair quality, productive. Season late.

Plants for Distribution.—Plants of the Hunn will be distributed this fall to residents of this state who send in a written application for them. The applications should be made immediately. They will be filled in the order in which they are received until the supply of plants is exhausted. It is desired that those who try this strawberry report to the Station whether or not it proves satisfactory.

THE CHINESE HIBISCUS.

The Chinese Hibiscus is a noble plant, a very pretty window shrub or pot plant, and will bloom almost continually if not given too much pot room. It is not especially particular what kind of treatment it gets, will do splendidly with the attention given an ordinary geranium, and is far superior to many plants cultivated in the amateur's window garden. It grows like a miniature tree, the large showy flowers showing to good advantage against its bright, glossy foliage, in short it is a plant that will delight all who are so fortunate as to possess one. How distinctly I recall the first blossom on a choice hibiscus that bloomed when I was ill; friends placed it on a table near my bedside. I thought I had never seen anything in flowers so perfectly lovely. The flower was a double, bright yellow, with crimson base, and before long to our astonishment it gave us a double crimson flower, for comparison perhaps, for nature indulges in many strange freaks to satisfy the flower grower.

MRS. N. B. HOOPER.

If Baby is Cutting Teeth,
be sure and use that old and well-tried remedy, Mrs. Winslow's SOOTHING SYRUP for children teething. It soothes the child, softens the gums, allays all pain, cures wind colic and is the best remedy for diarrhoea.

HOW TO MAKE MONEY.

Mr. Editor—I read how Mr. Walton made \$47 a month. I am only seventeen, but can beat that. I received a fine outfit from Gray & Co., Columbus, O., for plating gold, silver, nickel and white metal. It was complete, all materials, formulas, trade secrets and instructions, they teach their agents. I silver plated a brass ring in five minutes to test it. Made \$39 first week plating tableware and jewelry, \$65 second, \$243 first month. Brother makes \$10 a day selling outfits; get all I can do. Anyone can do as well by having good outfit. Hard times can't starve me.

WM. WETMORE.

FLOWERS ON THE FARM.

W^E must have them. A few, at least, even at the sacrifice of some of the spring cleaning. The ordinary, average farm is meant where the burdens fall upon the farmer's wife and daughter and "hired help" is a costly luxury.

The expression a good housewife made to me this summer, lingered long with me, while I turned it over in my mind, weighed it, sifted it and decided upon it.

"It don't pay to bother with posies on a farm."

She was a woman whose opinion was entitled to respect—a successful woman and one of experience, so I indulgently overlooked the term "posies" (a word I particularly dislike as applied to flowers—so disrespectful) and set about making up my mind upon the subject.



SWEET PEAS.

Does it pay or does it not? We can not eat them, if we had them near a city or summer resort we might sell them—but we haven't. Clearly, then, our only excuse for cultivating them is for the pleasure they give. The woman mentioned was a successful woman, but I recalled other successful women, in similar walks of life, whose flowers were a delight to the beholder and to themselves.

Flowers are for those who love them. Now that we have had a taste of the pleasure they give, a summer without flowers would seem almost a lost season, and we will only consent to such a condition when we must. True the temptation is very great, when we meet all the floral beauties to which Mr. Vick introduces us through his catalogue, to invite a goodly number into our gardens, but we who are limited in time, strength and money, must bring common sense, blessed common sense, to our aid and choose only those we are able to well entertain and care for.

A few well cared for are a pleasure, while more than one has time or strength to bring to their best are a burden.

Who, that has not experienced it, can imagine the joy of watching the plant, all along its development, from seed to exquisite flower. And how restful on a hot afternoon when harassed by work and worry to come for a brief time from under

their dominion and in the cool shade of the "east side" spend an hour weeding and watering in grateful flower beds.

But, farmers' wives and daughters, we who are used to denying ourselves luxuries, as we can have only the limited amount of beauty, what shall we choose? Our aim must be to select those that will give us the greatest return possible for the little we are able to give them.

Some flowers are especially dear to us because of associations, or intimate acquaintance while to others they may seem less beautiful. There are many tempting perennials but even they must have some care.

I have a couple of good hardy roses, lilies of the valley and two varieties of peony, sometime I hope to try others, but it is of my personal experience with annuals I intended to write.

Sweet peas, one of the necessities, come first in the spring. As soon as the snow has disappeared from the bed and frost has left the ground, the soil is made mellow and smooth and the peas are planted, in drills, six inches deep and two inches apart. Cover only about two inches deep at first and as they come up draw the soil around them and level down the ridges. Mine have brush for support and shade in the afternoon. Last summer they were in blossom from early in July into November and grew to be eight feet tall, the upper branches waving above all support I was able to give them.



PANSIES.

Next, we must have pansies, a few choice ones, for their marvelous and beautiful blossoms are with us from spring till the last of vegetation in the fall. My dahlias are to me a joy; I have not many varieties, only a canary and pink one this summer, but in the cool

days of early autumn what a brave showing they make? Protect them well from the first frosts and thus prolong their usefulness.

Perhaps it is because of associations, but I can not willingly give up the old morning glory or the nasturtium. What more beautiful sight on a summer morning than a drapery of morning glories, filled with blossoms, each individual blossom sending forth a cheery "good morning"? And the nasturtium, ever brave and cheerful, in constant bloom, and one of the few plants that can endure poor soil and hot sunshine—faithful friend, fragrant, bright and cheerful.



PHLOX.

In my seasons of experiment I tried a long bed of Shirley poppies; back of them a sunflower hedge, standing not too near together, but in several rows, and these, in turn, had for a background the soft grey of an unpainted building, and a charming effect it gave, for two or three weeks, as anyone who knows the poppy can well imagine.

I tried a bed of phlox, scarlet, rose and white, and what a feast of color! deep, rich, glowing—since then phlox has been one of the necessities.

Be sure, if you can, to tuck a few seeds of mignonette into your flower pots in the house before the frost king has left in the spring, and then transplant in odd corners of your flower beds; they will repay you in exquisite fragrance. If I can get time I have a row of asters and feel well repaid in the generous bloom they give in waning summer and autumn.

Then the geranium bed—plant them all out in a "well prepared bed of good soil," the ne'er do wells, the scraggy ones, the sickly ones, and how they do take on new life and break into bloom! Making a flower garden is largely a matter of getting the seeds into the ground in the spring, that hone, nature will, in a great measure do the rest.

Yes, farmers' wives raise flowers, even though you may be able to have but a pansy bed under the kitchen window. Its influence will be that of good; and as your children journey abroad in the world they will meet and recognize the flowers mothers loved and tended, and they will serve as a connecting link with home.

ANNA E. LANGDON.

Sterlingville, N. Y.

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THE SQUASH BORER.

Beautiful, but depraved, would be the verdict of twelve bright jurymen sitting in judgment on this insect. The adult squash borer is a moth, with brown or blackish brown body and front wings, tinged with olive green, the hind wings being transparent with a fringe of blackish brown hairs. The prominent long hind legs, bright orange colored, characterize this moth from all others.

This insect prefers the best varieties of squashes and is very apt to kill all the plants when they are grown upon a small scale. The females lay their eggs during the day, and mostly upon the stalk of the plant just below the ground, whenever cracks enable them to do so. The larvae which hatch from these eggs burrow into the stalks, and soon kill the plants. As a large number of eggs are produced by each female the damage caused is quite great. The life history of this insect may be given in a few words: Moths appear early in June, and continue to lay eggs until the middle of July. Eggs hatch in twelve to fifteen days. The larvae live in the stems till September, burrow in the ground two inches and spin a tough cocoon, in which they hibernate and change, to pupae in spring, when the moths appear, usually in early morning, and fly about during the hottest part of the day, becoming sluggish toward evening. Frequently they sleep upon the upper surface of the leaf.

The squash borer is not readily combated, and most of the remedies proposed have more or less failed. Professor John B. Smith, who has paid especial attention to this insect in New Jersey, gives

the following remedies: 1.—Manure or fertilize heavily and evenly, not in the hills only. 2.—Plant the land to summer squashes as early in the season as possible. If the fruit can be marketed to advantage, a full set can be planted, if not, a few rods only will answer as traps. 3.—Plant the Hubbards, or other main crop, as late as advisable without risking the crop, making the hills between those of the early varieties. 4.—Keep a lookout for the moth toward evening, kill all that are found sitting on the leaves. 5.—When the late varieties need the ground remove the vines carefully, so that the borers remain in the vines. These should be destroyed with the larvae contained in them. 6.—As the late vines begin to run well they should be covered at the fourth joint, so that suckers can be sent down. 7.—As soon as the crop is made the vines should be removed and destroyed, so as to prevent the borers from maturing.—*Dr. Otto Lugger in the Market Garden.*

**

ELM TIMBER FOR BICYCLE RIMS.—The so-called Blue Rock elm of Wisconsin is largely used for bicycle rims. A bicycle factory at Plymouth, Indiana, is said to have out a contract for 3,000,000 feet of this wood. The wood combines lightness and flexibility with strength. This particular elm is undoubtedly a variety of the American or white elm.

**

FLOWER CULTURE AT RAILWAY STATIONS.—Prizes to the amount of \$1,000, offered by the Midland Railway Company of England, to the station keepers along their route, resulted in 200 entries for competition. By this means the stations along the course were beautiful.

**

Eggs from Green Bones.

There are few poultry raisers who do not appreciate the great value of green cut bone as an egg producer. F. W. Mann Co., Milford, Mass., have recently put upon the market a new improved green bone cutter at a price within the reach of everyone. The owners of the smallest flocks can now obtain a supply of green cut bone at a nominal cost. The cutter is very powerful and cuts all kinds of bones easily and rapidly. Pronounced by scores of poultrymen to be just what has long been needed. At the price it will pay for itself in a short time. The manufacturers are thoroughly reliable.

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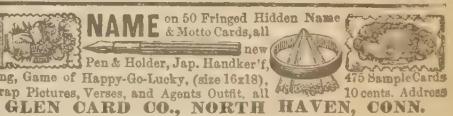
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BLACKBIRDS AND THEIR FOOD.

The year book of the Department of Agriculture, for 1895 recently issued treats on many subjects of interest to farmers and horticulturists. One of these is entitled "The Blackbirds and Their Food." This subject is very carefully and fully treated, giving very full information in regard to the diet of these birds, and the damage they cause, if any, to the growing crops. Our space admits only of the introduction, describing the birds and their migratory habits, and of the conclusions reached after a full examination of the subject:

Throughout the Eastern States and Mississippi Valley the grackle or crow blackbird is one of the most familiar and conspicuous birds. It appears in spring and early summer about farmhouses and villages, where it finds its favorite nesting places. Five different kinds occur within our borders, but the present paper is concerned only with the common purple grackle (*Quiscalus quiscula*) and its two subspecies, the bronzed grackle (*Quiscalus q. cæneus*) and the Florida grackle (*Quiscalus q. agleæus*). The purple grackle is abundant in the region east of the Alleghanies as far north as New York, and is found sparingly in New England. The Florida grackle is distributed over the region extending from the coast of South Carolina southward into the peninsula of Florida and westward to Louisiana. The bronzed grackle occupies the Mississippi Valley and Great Plains as far west as the Rocky Mountains, ranges northward to Great Slave Lake and southern Newfoundland, and east to the coast of southern New England.

In Canada and the northern United States the crow blackbird is only a summer resident, but in the Southern States it is present throughout the year, and in winter its numbers are increased by millions of migrants from the north which find here a congenial winter home. It does not occur south of the Gulf States, and stragglers have been found during the cold months as far north as Illinois, and even Minnesota.

At the first approach of spring, the crow blackbirds begin to move northward, closely following the retreat of winter. During the summer months they cover the whole of the United States east of the Rocky Mountains, except New England, though they are most plentifully distributed over the great grain-raising states of the northwest. In New England crow blackbirds are of local occurrence.

They are tolerably abundant in Connecticut, but in the more northern states breed in certain favored localities only, and are entirely absent from large areas.

In the northern United States the southern movement begins about the end of September, although the habit of collecting in flocks immediately after the breeding season confirms the belief that the birds disappear from many localities during the month of August. It thus appears that their stay in the northern part of the country is limited to the six warm-

est months of the year; hence whatever they do that is either beneficial or injurious must be accomplished during that time. In the south on the contrary, they are found throughout the year, and in largely increased numbers during the winter. Fortunately, however, this is not the season of growing crops, so that the damage done is principally confined to the pilfering of grain left standing in the shock. It is probable, however, that at this season they feed largely on weed seeds, mast, and waste grain scattered in the field.

SUMMARY.

It appears that if the mineral element be rejected as not properly forming a part of the diet, the food of the crow blackbird for the whole year consists of animal and vegetable matter in nearly equal proportions. Of the animal portion twenty-three twenty-fourths are insects, and of the insects five-sixths are noxious species. The charge that the blackbird is a habitual robber of other birds' nests seems to be disproved by the stomach examinations.

Of the vegetable food it has been found that corn constitutes half and other grain one-fourth. Oats are seldom eaten except in April and August, and wheat in July and August. Fruit is eaten in such moderate quantities that it has no economic importance, particularly in view of the fact that so little belongs to cultivated varieties.

The farmer whose grain is damaged, if not wholly ruined, by these birds may attempt to count his loss in dollars and cents, but the good services rendered by the same birds earlier in the season can not be estimated with sufficient precision for entry on the credit side of the ledger. Thoughtful students of nature have observed that there is a certain high-water mark of abundance for every race or species beyond which it can not rise without danger of encroaching upon and injuring other species, not even excepting man. This is true of every species in nature, whether it be one which, at its normal abundance, is beneficial to man or otherwise. To no group does this apply with more force than to the insects, many species of which frequently exceed their ordinary bounds and spread destruction among crops. The same argument applies to the birds. However useful they may be in a general way, there is danger that they may become too numerous. While the destruction of a noxious insect is greatly to any bird's credit, still it is believed that the principal value of the useful bird lies not so

much in this special work as in keeping the great tide of insect life down to a proper level. The examination of the food of the blackbirds has shown that they do a good share of this work, and are therefore most emphatically useful birds. This does not mean that they do no harm, or that they should be permitted to do all the harm they wish without restraint. It is not probable that the grain eaten by blackbirds under ordinary circumstances occasions much loss to the farmer, because so much of it consists of scattered or waste kernels. When, however, they descend upon a corn or wheat field in flocks of hundreds or thousands they inflict a real damage; and this simply shows that the species is too abundant and ought to be reduced, or that the birds have assembled from all the surrounding country and have become too crowded in one restricted locality. In either case the farmer should protect himself by any practical means and should not submit quietly to being robbed merely from a sentimental idea of the bird's past or probable future usefulness. If the crop and the birds' lives can both be saved, well and good; but if not, let the extreme penalty be paid.

Upon the whole, crow blackbirds are so useful that no general war of extermination should be waged against them. While it must be admitted that at times they injure crops, such depredations can usually be prevented. On the other hand, by destroying insects they do incalculable good.

* *

CORK TREES GROWING IN GEORGIA.

A Georgia correspondent of the Galveston *News* says: About thirty-five years ago several young cork trees were sent here by the government and set out to test their adaptability to this climate. Three or four are yet living, but the largest one is in the front yard of the Jackson House, being two feet or more in diameter. Last week it was stripped of its bark around the trunk under the direction of Colonel Richard L. Warthen, who manifests great interest in trees of all varieties, and samples of the cork will be forwarded to the Agricultural Department at Washington and to the Atlanta Exposition. The bark, or cork, is two and a half inches thick, and is good material. Colonel Warthen, who has studied the matter closely, is confident that this is the first tree that cork has ever been taken from, in the United States.

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was necessary in using Aladdin's Wonderful Lamp — but

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FARMERS' GARDENS.

When you visit the garden of the average farmer, you are less apt to be struck with what you find there than with what you fail to find. The thing likely to impress you is the fact that any one should be willing to do without so many vegetable luxuries that might be growing in abundance at his door. The great need of our gardens is a greater variety and choicer kinds.

Every year, early in their season, we see piles of tender asparagus, green onions, lettuce and radishes at the market places for the use of the town's people. But do our farmers have them in abundance? We who till the soil are surely entitled to its best gifts, and are in position to obtain them so much easier than are our city friends, and may have them in so much fresher, better condition.

The cabbage is so common that it has become a prominent feature in the sameness of the garden patches along the country roads; but its cousin, the cauliflower, a much superior vegetable, is rarely seen there. Yet it is a hardy plant, and we may have it in all its crispy freshness for the simple outlay of a few hours of labor and the expense of a few seeds. Yes, the seeds are high-priced I know, and that is the bugbear with some of us. But a few seeds go a long ways, and what are left over are good for the next year.

Egg plant is almost unknown in the farm gardens of Minnesota, but for no good reason that I am able to see. The Early Dwarf Purple will mature in this climate and be ready for the table by the first of August. It thrives in our rich soil and yields abundantly. It is a plant, too, that will stand a good deal of drought—a thing in its favor we are all prepared to appreciate. We may save our own seed, so the expense is only of labor after getting a start.

The varieties of beans for the garden are almost numberless. Among them all, none is superior to the rich Limas when taken fresh from the bush. If too much trouble to get poles for the running varieties, we now have three or four Limas that need no poles. The largest of these, Burpee's Bush Lima, is really a fine bean. It needs a season rather longer than ours in which to do its best; but I have had no difficulty in getting the beans to ripen perfectly for seed, during the past three years. Henderson's Bush Lima is a smaller bean; but I believe it to be somewhat hardier and a few days earlier than Burpee's.

The different kinds of melons do not receive half the attention they deserve. Hundreds of carloads are shipped into our state every summer, when we might easily grow our own melons. To me there is no great degree of satisfaction in the large, coarse-grained melon that was packed green and has been shipped one or two hundred miles, bruised in handling, broiled in the sun and held in dealer's hands until the germs of decay and even of disease, have established a foothold. At the side of such, place a few of our choicest home-grown melons, fresh from the vines and make a test of their com-

parative merits. Then see if you do not wish that the Southern melon, which cost you near the price of a bushel of wheat, had fallen into the hands of some friendly darkey (instead of a shipper), and that you had grown a hundred melons where the bushel of wheat was harvested.

There is constant improvement going on in the line of vegetables, as well as elsewhere. We are too apt to set our heart on some old variety and cling to it until the wide-awake portion of the world has passed far ahead of us with something better. It is to our interest to keep an eye open for new things, and to make an occasional trial of them, even if they do not turn out exactly as the seedman's colored plates represent them.

It costs so little in either time or money to test a new vegetable. It is quite different from putting money into unknown trees for an apple orchard, where years of care and waiting must pass before the result is known. Of course, a feverish haste to grab at everything advertised as a novelty might be as bad as getting into the narrowest of ruts. It is only a wisely discriminating outlook for better varieties that is here recommended, where it may take the place of an oyster-like contentment with inferior things.—C. L. Hill, in Minnesota Horticulturist.

MY WIFE Can Not See How You Do It For the Money.
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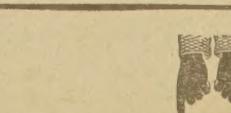
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FLOWERS AS FOOD.

The following interesting account of the use of different kinds of flowers for food is given by the *Scientific American*:

In many parts of India the flowers of a saponaceous tree, Bassia latifolia or mah-wah, form a really important article of food. These blossoms, which are succulent and very numerous, fall at night in large quantities from the tree, and are gathered early in the morning and eaten raw. They have a sweet but sickly taste and odor. They are likewise dried in the sun and sold in the bazars. The Bheels dry them and store them as a staple article of food, and so important are they considered for this purpose that when in expeditions for the punishment of or subjection of these tribes, when unruly, a threat is made by the invading force to cut down their Bassia trees, the menace most commonly insures their submission.

An ardent spirit like whisky is distilled from these flowers, and is consumed in large quantities by the natives of Guzerat, etc. The Parsees and hill people eat the flowers both raw and cooked, often with the addition of grain, and also make sweetmeats of them. A single tree will afford from 200 to 400 pounds of the flowers.

The blossoms of another species, B. longifolia, are employed in a similar manner by the natives of Malabar and Mysore, where it abounds. They are either dried and roasted and then eaten or are bruised and boiled to a jelly and made into small balls, which are sold or exchanged for fish, rice and various sorts of small grain.

The flowers of the Judas tree, Cercis Siliquastrum, of Europe, have an agreeable acid taste and are sometimes mixed with salads or made into fritters with batter, and the flower buds are pickled in vinegar. The flowers of the American species, C. Canadensis, the red bud, are used by the French Canadians in salads and pickles.

The flowers of the Abutilon esculentum, *bencao de deos*, are used in Brazil as a boiled vegetable.

The flowers of Moringa pterygosperma, the horseradish tree, are eaten by the natives of India in their curries.

The large and showy flowers of Tro-*paeolum majus*, the Indian cress or nasturtium, are frequently used along with the young leaves as a salad. They have a warm taste, not unlike that of the common cress, and it is from this circumstance that the plant has obtained the name of nasturtium.

The young calices of Dillenia scabrella, and D. speciosa, which are swollen and fleshy, have a pleasantly acid taste and are used by the inhabitants of Chittagong and Bengal in their curries and also for making jelly.

The flowers of Rhododendron aboreum are eaten by the hill people of India, and are made into a jelly by the European visitors. Yet poisonous properties are usually ascribed to the species of this genus, and it has been said that the R. Ponticum was the plant from whose flowers the bees of Pontus collected the

honey that produced the extraordinary symptoms of poisoning described as having attacked the Greek soldiers in the famous retreat of the ten thousand.

The flower buds of Zygophyllum Fagopyrum are used as a substitute for capers, and the flowers of Melianthus major, a plant of the same order, are so full of honey that the natives of Good Hope, where the plant grows wild, obtain it for food by shaking the branches, when it falls in a heavy shower.

Coccoloba uvifera is remarkable from the peculiarity of the calyx, which becomes pulpy and of a violet color, whence the plant is called the seaside grape. The pulpy calyx has an agreeable acid flavor and is edible.

The flower stalks of Hovenia dulcis become extremely large and succulent and are used in China as a fruit. It is said that in flavor they resemble a ripe pear.

The flowers of the pumpkin were cooked and eaten by some of the tribes of the American Indians, especially by the Aztecs, by whom they were highly esteemed.

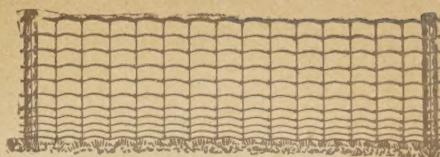
The cauliflower, which has been known from remote antiquity, differs in a remarkable manner from all the other varieties of the cabbage tribe, whose leaves and stalks alone are used for culinary purposes. Instead of the latter being used, the flower buds and fleshy flower stalks, which form themselves into a firm cluster or head varying from four to eight or more inches in diameter, here become the edible portion and one of the greatest of vegetable delicacies.

The flower buds of Capparis spinosa, a plant which grows on walls, etc., in the south of Europe, are pickled in vinegar in Italy and form what are commonly known as capers. These are chiefly imported from Sicily, though the plant is largely cultivated in some parts of France.

The cloves of commerce are the unexpanded flower buds of Caryophyllum aromaticus (Myrtaceæ), a small evergreen, native of the Moluccas, but cultivated in several parts of the East and West Indies. Before the expansion of the flowers, which are produced in branched panicles at the extremity of the branches and are of a delicate peach color, the buds are collected by hand, or else sheets or mats are spread under the tree and the buds brought down by beating it with sticks. They are cleaned and then dried in the sun. A uniform brown color is imparted by slightly smoking them over a wood fire. The flower buds of Calyptanthes aromaticus, another plant of the same order, may be advantageously substituted.

The flower buds and the berries of the myrtle, Myrtus communis, were eaten as spices by the ancients, and are still used in Tuscany instead of pepper.

Long Pepper is furnished by the immature spikes of flowers of Chavica Roxburghii, which are gathered and dried in the sun. In chemical composition and qualities it resembles ordinary black pepper and contains piperine.

**FROM ANOTHER POINT OF VIEW.**

I see that Old Durham rushes into print to air his views on the fence question. He seems to be perfectly *cowed* by elasticity. I think that Page fence a sancy, impudent thing, always *answering* back in the most aggravating manner. Then you never know just where to find it. Now that "just as good as Page" suits me. It never "kicks" at anything, and if it's absolutely necessary to go through it, one can do it, so there!

[Signed.] OLD BRINDE COW.

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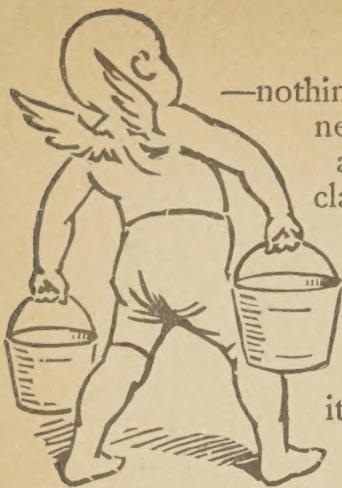
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PLANTS FOR SOUVENIRS.

A GROWING plant that speaks to us of a visit, or a journey is a pleasant possession. Pressed flowers suggest a happy experience, but with their dry leaves and faded colors, they can do little more, and if one happens to be in a gloomy mood, when looking at them, their message is not a cheerful one; they seem to say: "Your pleasant time is behind you; it has gone with your freshness and beauty." But the growing plant helps to bring the past into the present, and in a measure to keep its pleasures alive.

Surely the joy of a visit has not wholly gone, when in your garden, you see the bright faces of the pansies and daisies you have brought home as souvenirs; or breathe the fragrance of the artemesia and rose geraniums that came with them.

I have in mind a pretty garden, that constantly speaks to its owner of her journeys and visits. It has only pleasant words to say. There are evergreens from the White mountains. How many beautiful pictures do they suggest?

There is an ivy from Mount Vernon, that furnishes a text for a lesson in history, for the children, who visit the garden. There is a barberry bush from the country home of a friend, that reminds its owner of the warm hospitality she received. It takes her back also to the early days of our country, when the only barberry bushes were seen growing in the old gardens. Other plants, as souvenirs, tell other stories.

Not long ago I saw an English ivy many yards long that grew from a small cutting, picked in Chester, England. It travelled across the ocean in a trunk. For a year it refused to grow, ungrateful for the kindest care.

Persistent attention at last conquered its indifference, and, when it did become responsive, it soon repaid its owner for the trouble it had given her.

Whenever she opens the door, it is a beautiful sight, and is ready to take her thoughts back to one of her happiest summers. It does more than that, for it suggests the beautiful, old, massive Chester Cathedral, that dates back to the Norman kings.

Cuttings can be carried a long distance if carefully protected. If a potato can be procured it is a good aid on the journey. The stems put into it are kept moist without injuring the other contents of the trunk.

Cuttings brought home for souvenirs sometimes root easily, being willing to respond to a little kindness. Others are more obdurate; but some very difficult plants, like the lemon verbena and periwinkle, that many think cannot be rooted outside of a greenhouse, have yielded to patient care. The following treatment has proved successful with both of the plants mentioned: Put the cuttings in a small pot and put the pot in a saucer. Keep the saucer partially filled with water and the plant covered with a glass tumbler. One of my friends succeeds well in rooting cuttings in water. She finds a bottle is better for the purpose than a tumbler, possibly giving more warmth to the plant. She fills the glass when necessary, but does not change the water, thinking that when it grows stagnant it helps the roots to form. Very soon after a root appears she pots the plant.

Few could afford to send orders to a greenhouse large enough to furnish all their visitors with rooted plants for souvenirs; but it is pleasant to multiply the plants one buys by rooting cuttings of them. The work is interesting, and the gift has an added charm, being "a gift with the giver."

Any lover of plants, who begins to propagate them, finds a greater pleasure in gardening than ever before.

A lovely old lady, whose life had never been brightened by any children of her own, appreciated their pleasure. She said, when an invalid, looking back over her life: "I have always loved plants; those that were given to me and those I bought at a greenhouse were always dear, but the ones I grew myself were dearer. I never had any children, and this satisfied the mother feeling."

If such plants have an added meaning, because they are souvenirs of pleasant journeys, or visits, or of friends, they are, of all plants, the best.

Bulbs and seeds, as well as growing plants, make good souvenirs for a parting guest, who is a lover of gardening. In making one's collection in the spring or fall, it is pleasant to keep this thought in mind.

EVELYN S. FOSTER.

**
"Who is this Dr. Holmes?" asked a lady recently of a New England bookseller according to the *Literary World*.

"I've never heard of him, but his wife Mary J. Holmes, writes lovely books."

A SLIGHT MISTAKE.

One Sunday morning last winter a gentleman whose head was somewhat scant of hair, entered a drug store and purchased a carnation. The day being very cold he did not know where to put his pink to keep it from freezing—if he put it in his buttonhole it would freeze; if he put it in his pocket it would get crushed. The thought came to him to put it in his hat. So into his hat it went. When he arrived at the church he had forgotten his flower, and walked boldly up to a seat near the front, with the stem of the pink stuck in the hair at the back of his head and the flower part bobbing up and down over the bald portion of his cranium. That man says that the next time he wears a flower to church he will have a committee appointed to tell him where to wear it.

S. F. P.

CONTENTS.

	PAGE
Andromedas, The	7
Asparagus in Winter Time	13
Begonia, The Tuberous	13
Blackberry, The Rathbun	2
Blackbirds and their Food	12
Cork Trees growing in Georgia	12
Cucumbers, Growing	2
Farm Economy, Harry Greenway's	1
Flower Culture at Railway Stations	11
Flowers and Grasses, How to Crystallize	6
Flowers as Food	15
Flowers on the Farm	10
Fruits in the South	5
Garden, Our	3
Gardens, Farmers'	14
Geranium, Rose, Hardiness of	6
Letter Box	6
Fruit of the Japan Quince, Malva Moschata, Orange Candytuft, Althaea, Lilles, Hypericum, Hibiscus Sunset	9
Lily Pond, Charms of the	16
Plants for Souvenirs	4
Plants, Some rare, of Biscayne	4
Poetry, A November Garden	1
Raspberries, Perpetual or Twice Bearing	13
Seeds, Curious Food	3
Small Fruits, Tests of	7
Soil Protection in Winter	7
Squash Borer, The	11
Strawberry, The Hunn	9
Sweet Peas, Double, Again	8
Sweet Peas, Double—A Reply	6
Trees, Planting, on Waste Ground	5